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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/341,101	08/18/1999	LARS ERICSSON	185/054	4745

7590

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RICHARD WIENER  
POLLOCK VANDE SANDE & AMERNICK  
PO BOX 19088  
WASHINGTON, DC 200363425

EXAMINER
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HERNANDEZ, OLGA

ART UNIT	PAPER NUMBER
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3661

DATE MAILED: 11/19/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/341,101

Applicant(s)

ERICSSON ET AL.

Examiner

Olga Hernandez

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 22 October 2002.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19 and 21-31 is/are rejected.
- 7) ☒ Claim(s) 20 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All   b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                             | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____                                    |

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## DETAILED ACTION

### *Response to Arguments*

Applicant's arguments filed 10/22/02 have been fully considered but they are not persuasive.

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3, 6, 14, 19, 28, 29 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Diekhans (6,073,070).

As per claims 1, 14 and 29 Diekhans teaches:

- a position-determining apparatus comprising:
  - o at least one detector equipment placed generally at a designated place on the working machine spaced from the working part and adapted to enable the determination of the position of the designated place in a fixed coordinate system (figure 7); and
  - o an inclination and orientation measuring device adapted to enable the determination of the orientation of the designated place on the working machine in the fixed coordinate system (column 3, lines 17-20 and column 6, lines 13-15, 53-56),

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- at least one position relationship device adapted to enable the determination of a positional relationship of the working part of the tool relative to the designated place on the working machine in a machine based coordinate system (figure 7);
- a calculating device adapted receive measurements from the position-determining apparatus in the fixed coordinate system and measurements from the at least one position relationship device in the machine-based coordinate system to provide at least one of the position of the working part of the tool in the fixed coordinate system and the orientation of the working part of the tool in the fixed coordinate system (column 2, lines 60-67 and column 3, lines 1-10).

Even though Diekhans does not clearly show the use of a fixed coordinate system; it is understood that any GPS system has its availability in the market. Therefore, it would have been more than obvious to one of ordinary skill in the art to know/use/apply it to any navigation system.

Further, it has been held that the recitation that an element is "**adapted to**" perform a function is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. *In re Hutchison*, 69 USPQ 138.

As per claims 3, 6 and 19, Diekhans teaches the same claimed by the applicant (figure 7).

As per claims 28 and 31, Diekhans teaches all the elements claimed by the applicant (figures 1, 6 and 7).

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Claims 4, 7, 15, 27 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Diekhans (6,073,070) in view of Ford (6,211,821).

As per claims 2, 4, 7, 15, 27 and 30, Diekhans does not teaches the north-seeking/target unit. However, Ford teaches it in column 1, line 20. Therefore, it would have been obvious to one of ordinary skill in the art to combine the aforementioned inventions in order to enhance the system

Claims 5, 8, 18 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Diekhans (6,073,070) in view of Johnson (5,606,444).

As per claims 5, 8, 18 and 20, Diekhans does not teach the optical unit aligns itself towards the stationary measuring station with help. However, Johnson teaches it in column 2, lines 5-15. Therefore, it would have been obvious to one of ordinary skill in the art to combine the aforementioned inventions in order to enhance the system

Claims 9 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Diekhans (6,073,070) in view of Schupfner (6,374,190).

As per claims 9 and 22, Diekhans does not teach how to calculate the angular position relative to the map. However, Schupfner teaches it in column 1, lines 17-25. Therefore, it would have been obvious to one of ordinary skill in the art to combine the aforementioned inventions in order to enhance the system.

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Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Diekhans (6,073,070) in view of Johnson (5,606,444), further in view of Ford (6,211,821).

As per claim 21, neither, Diekhans nor Johnson teaches the north-seeking/target unit. However, Ford teaches it in column 1, line 20. Therefore, it would have been obvious to one of ordinary skill in the art to combine the aforementioned inventions in order to enhance the system.

Claims 10 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Diekhans (6,073,070) in view of Ethridge (5,798,733).

As per claims 10 and 23, Diekhans does not teach the accurate device that at time intervals measure the actual position of the vehicle. However, Ethridge teaches it in column 2, lines 17-23. Therefore, it would have been obvious to one of ordinary skill in the art to combine the aforementioned inventions in order to enhance the system.

Claims 11 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Diekhans (6,073,070) in view of Ethridge (5,798,733), further in view of Vanderwerf (5,774,832).

As per claims 11 and 24, neither Diekhans nor Ethridge teaches how to calculate the vehicle acceleration and how to integrate the acceleration. However, Vanderwerf teaches it in column 1, lines 10-16. Therefore, it would have been obvious to one of ordinary skill in the art to combine the aforementioned inventions in order to enhance system.

Claims 12 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Diekhans (6,073,070) in view of Ethridge (5,798,733), further in view of Yamada et al (5,974,675).

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As per claims 12 and 25, neither Diekhans nor Ethridge teaches what is stated by the applicant. However, Yamada teaches it in the abstract. Therefore, it would have been obvious to one of ordinary skill in the art to combine the aforementioned inventions in order to enhance the system.

*Allowable Subject Matter*

Claims 20 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

*Conclusion*

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

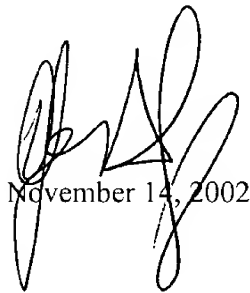
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Olga Hernandez whose telephone number is (703) 305-0918. The examiner can normally be reached on Monday through Friday from 8:30 am to 5:00 pm.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William A. Cuchlinski can be reached on (703) 308-3873. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-7687 for regular communications and (703) 305-7687 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.



November 14, 2002

Olga Hernandez  
Examiner  
Art Unit 3661



WILLIAM A. CUCHLINSKI, JR.  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3600